



THE APRIL MEETING

Orbiting Satellites Carrying Amateur Radio have been 'around' for more than 30 years, providing technical opportunity and pleasure to tens of thousands of Radio Amateurs. It has been said that "an OSCAR is just another repeater" but there can be no comparison with any station organised by a local repeater group and the dedication found in AMSAT members worldwide to launch and maintain a satellite. To start with, "getting it up there" is very expensive, then there is no handy 13A socket to plug into and the environment is exceedingly hostile with intense radiation and all sorts of high speed debris trying to reduce the carefully constructed electronics into just another piece of space junk!

At the meeting on 2nd April we will welcome Richard Limebear, G3RWL, representing AMSAT-UK, to describe the latest developments in OSCAR's and how work is progressing on the "ultimate" Phase 3D satellite, due to be launched this year.

As already stated, this is the most expensive branch of Amateur Radio and although there have been some very generous donations from many countries for Phase 3D, more cash will be required to keep the system up and running after launch. To this end AMSAT have requested Clubs and Societies throughout the UK to organise fund raising activities, so we regard this meeting as our opportunity to make a contribution.

The accumulation will be made up from:- A donation from club funds. The profit from the evening raffle. A collection box for personal donations. If you would like to donate a raffle prize this would be welcomed.

We can look forward to an informative and rewarding evening in the Marconi College, Arbour Lane, Chelmsford, commencing at 7.30pm.

DATES FOR YOUR DIARY

- 2 April CLUB MEETING - Oscar Satellites.
- 14 April CAMBRIDGE REPEATER GROUP RALLY.
- 17 April SECOND NFD MEETING - QTH of GØGJS at 8pm.
- 20 April INTERNATIONAL MARCONI DAY.
- 20 April RSGB HQ SATURDAY OPENING.
- 2 May CLUB MEETING - TCP/IP Demonstration.

INTERNATIONAL MARCONI DAY - Pat, GØSBQ Saturday 20th April 1996.

The Society will again be operating an official station in the above event based at The Chelmsford Science & Industry Museum, Sandford Mill Road, Chelmsford, CM2 6NY.

Members who would like to operate the Society rig on SSB/CW or SSB/CW/Digital using their own rig (a Longwire aerial is available) are asked to contact Pat O'Riordan GØSBQ on (01245-467545) or at the April meeting to book an operating slot. Operation will be between 0100hrs on 20th April to 0059hrs on 21st April, LOCAL TIME.

This year, some new categories for awards have been introduced i.e.:-
FIXED AMATEUR - work 15 official stations Mixed mode or CW only or Digital only.

MOBILE AMATEUR - work 12 official stations Mixed Mode.

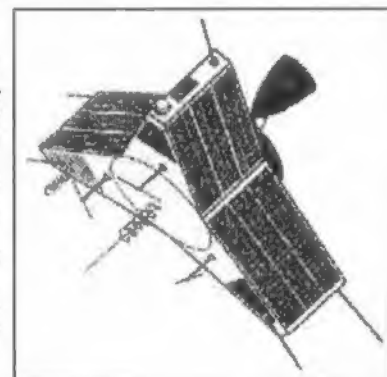
CLUB/GROUP - work 20 official stations Mixed or CW only or Digital only.

SHORTWAVE LISTENER - log 15 official stations Mixed mode or 10 stations CW only.

MEMBERS NEWS

This month the Society welcomes Jim Beatwell, a SWL, who joined at the last meeting. Jim has been receiving pictures transmitted on the Thursday evening SSTV net.

Commiserations to Andrew, G4KQE who is out of action due to breaking his left arm at the beginning of the first local evening DF Event
BEWARE OF LOW LEVEL BENCH SEATS IN THE DARK! Andrew found one which put him into traction in Colchester hospital for two days and off work for at least a month.



LAST MONTHS MEETING - or

"This is the news brought to you by...." - Eric, G8ADX

On this occasion the club welcomed Mr Jonathan Higgins of the News and Current Affairs Department of the BBC. Jonathan, as Manager of Field Activities - BBC News Resources, was able to draw on 17 years experience as an engineer and manager in studios, outside broadcasts and radio links to enlighten us on the subject of Electronic News Gathering (ENG). This experience was supplemented by a truly portable (slightly larger than three cornflakes packets) Video Tape Machine (VTR), a laptop computer, both interfaced with the college's video projector and a slide projector.

News gathering began in about 1922, the silent movie era, with topical film clips accompanied by the inevitable piano playing. In cinemas, this progressed to weekly "Newsreels" and this reminded us of Pathe Gazette's crowing cockerel.

Filmed news was, of course, out of date by the time it reached the viewers whereas radio had the edge by relaying bulletins from wire services. Sound news broadcasting development (there was no TV News until after the second world war) depended on the development of some form of recording. In 1931 a Steel Tape Magnetic Recorder appeared but was far too large and heavy to be used "in the field". 1933 saw an Acetate Disc Recorder... grooves carrying the information were cut in the discs at the time of recording... still large and heavy. Meanwhile, the Germans developed a Magnetaphon Acetate Tape Recorder. Later, a "midget" version of the Disc Recorder was developed weighing only 15Kgs (33lbs), one of which was used by Wynford Vaughan Thomas at the Battle of Anzio. These recordings then had to be transmitted or be taken back to the UK to be broadcast on "The Home and Forces Programme of the BBC" by Bruce Belfridge. After the war came the development of the 1/4" reel-to-reel recorder.

In 1946, television transmissions were restarted from Alexandra Palace in North London but there were still no news programmes until July 1954 when film was sent back to A.P. by whatever means (dispatch riders) for developing (60-80 minutes in the "soup") editing and transmission. The 1950's saw the development of the 2" VTR... but too large for field work. As technology progressed, special occasions could be recorded and sent back by dispatch riders and later still sent by means of land lines and/or terrestrial line-of-site micro-wave links. Lines installed around London for the Coronation are still in use today. 1966 saw the first satellite transmissions mainly for inter-continental use.

(continued on page2, column 2)

RONALD FERGUSON G4VF by Geoff G7KLV



Second-hand book shops fascinate me. Unfortunately we don't have one in Chelmsford but some of the smaller eastern counties' towns and villages have very good ones. One rather odd one is in Yoxford, a village just off the A12, near Saxmundham.

Opening hours are rather erratic but it is often quite rewarding. On my last visit I found a book about the Marconi International Marine Company. It was rather expensive.

Glancing through it I found a photo of the wireless room on the RMS Queen of Bermuda. Prominent in the foreground

was a CRD150/20 triple diversity telephone receiver. This consisted mainly of three CR150 receivers modified for diversity operation and designated version CR150/4.

Back in 1946 this had been one of my first jobs. As a Technical Assistant (a fine title but really only a dogsbody) under the direction of George Grisdale G5GZ I did the detailed design work on this receiver.

Of course, I just couldn't resist it, could I! The book is "Wireless at Sea, The First Fifty Years" by H.E. Hancock and published in 1950 by MIMCO to commemorate their Jubilee and was complete with a well worn dust cover. It is dedicated to the many British Marine Radio Officers who lost their lives at sea; it is a good read and well illustrated.

You may well ask, what is he getting at! The point is that it mentions Ronald Ferguson. I had come across this name in connection with my researches in to the history of CARS.

Talk to any of the older Club members and they will all tell you that he was one of life's true gentlemen. He did a great deal for the Club and as our first President is remembered with sincere affection by all who knew him.

He joined Marconi's in 1910 and by 1914 at the age of 20 was chief radio officer on board the Canadian Pacific steamer Empress of Ireland. She had been fitted with wireless four years earlier.

A tragedy that captured worldwide attention occurred in dense fog in the Gulf of St. Lawrence when the Empress was struck amidships by the Norwegian collier Storstad. Ron had gone off duty but heard the alarm and went back to the wireless cabin and sent out distress signals which were immediately answered by the nearby Marconi station at Father Point. A pair of government tugs were eventually sent out to the scene of the disaster about twenty miles away.

About ten minutes after the collision water got into the stokehold, cut off steam and put the dynamos out of action. He then tried to bring the emergency gear into operation when the ship suddenly lurched causing the accumulators to burst open the doors of their cupboard and spill their contents over the floor.

There was nothing more he could do so he went out on deck, picked up a handy deckchair and put his arm through it. At the same time the ship turned on her side. He was thrown in the water as she sank.

After swimming about for fifteen minutes in near freezing water he managed to scramble into a lifeboat and was eventually taken on board the collier which although badly damaged managed to survive. He later transferred to one of the tugs and, because, she was put to sea at short notice there was no wireless operator on board. Cold, wet, and exhausted he then got in touch with Father Point again and communicated all the details of the disaster so that essential services could be organised for the survivors. His colleague also survived.

Of the 1467 souls on board only 444 were saved and had it not been for wireless it is possible that many more would have perished.

Shortly afterwards he worked for Canadian Pacific Ocean Services in an administrative capacity but his heart was in wireless and he later left to become a wireless officer in the Royal Flying Corps.

After the end of WW1 he joined the Radio Communication Company which was taken over by MIMCO in 1928. Soon after he was made joint general manager of the merged companies to later become general manager.

As G4VF, Ron was a keen amateur and actively involved in organising NFD's in the sixties, but there are others who would probably know more about his activities then. Any takers?

Ronald Ferguson was one of the lucky ones. Many of his colleagues gave their lives at sea during the two world wars. There are countless accounts of heroism displayed by the Marconi operators. They would probably say it was just part of the job!

LAST MONTHS MEETING - continued from page 1.

In the 1970's progress in ENG really took off, due mainly to the American TV's aggressive approach. In 5 years great strides were made in achieving smaller equipment. VTR's went from 2" to 1" to ¾" to ½" tape sizes with the ¾" Sony U-Matic among the more well known VTRs. On the camera front, the Betacam was developed during 1978-80 to settle on L & C (separate luminance & chrominance... similar to our present Hi-8 domestic system). CCD's (Charge Coupled Devices) produced an instant improvement over multi tube cameras in size and by not requiring lengthy set-up procedures. These advances lead directly to our present day camcorders.

There was still the problem of getting the pictures and sound back to the switching centre. Land lines rarely terminated where the news was, microwave links depended on a clear line of site and distance. Links, operating in the 2GHz band, were mounted on fast response vans. Later, as equipment became smaller, these vans were fitted with editing equipment and on board power generators. One Los Angeles station alone had 20 such vans! The 2GHz link would have the vision, the programme audio on a sub-carrier or as sound-in synes and engineering Talk Back (TB). An additional 70cm link would carry other TB.

The next progression was to vehicles equipped with Satellite Uplinks (a misnomer as they are used in both down and up!) utilising Geostationary Satellites. Further developments have produced "transportable" uplinks which pack into flight cases and weigh approximately one ton, often taken on flights as "excess baggage". At this time there are about 55 satellites in geostationary orbit, 40 from the UK.

We were shown numerous pictures of ENG equipment in action including equipment despatched to Israel the night before. We are all familiar with pictures from war zones, peace conferences, disaster areas, state occasions, etc, etc.

The prime requirement is to BE FIRST so the equipment must be easily transported. Generally, it can all be operated by one person. However, if it is in a "dangerous" environment, e.g. a war zone, a second person is sent to warn the person with eyes glued to viewfinder of incoming flack.

The trends now are:-

Further into digitised signals which require less bandwidth and suffer less from distortion.

Digital disc based recordings now being developed by the Japanese.

Electronic stabilisation of camera shake

Further use of Digital Standards MPEG1, 2 & 4.

Digital SNG Stations

The subject of the presentation was far too complex to recount here in it's entirety but was very impressively covered by Jonathan Higgins with the thoroughness one has come to expect from Auntie BBC. Our thanks for a very interesting evening.

Our gratitude goes to Mrs Hardcastle's lad, Geoff, for tending the display monitors, and to Roy, G3PMX, for providing the sound gear and arranging the setting of everything.

Most of us are familiar with the BBC's Virtual Reality News Studio... now you see it... but it's not there. What if it's applied to the news itself?

PS. Did anyone make a bid for the mobile links van which is being scrapped?

COMMITTEE MEETING

The next Committee meeting will be held at 7.30pm on Wednesday 10th April, in Telford Lodge, you are welcome to join us.

JACKPOT RAFFLE

How time flies! It's time again for the bonus draw from the accumulated tickets for members who have supported the monthly raffles over the last six meetings. The prize is a desk top digital quartz clock with 24 hour display, just right for logging in the shack.

MEMBERS ADVERTISEMENT

Wanted. Top-Band Mobile Aerial (receiving only), short whip section preferable.

Wanted. 1970's RF Power Transistor PT31992 or BLY84L.

Contact Andrew, G4KQE, QTHR, ☎ 01376-583094.

73 from Roy & Ela Martyr,
G3PMX & G6HKM

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